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Hiroyoshi OHASHI^{a,*} and Kazuaki OHASHI^b: The Correct Scientific Name of “Shirobana-hagi”, the Oldest White-Flowered Race of *Lespedeza* (*Leguminosae*) in Japan

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Summary: *Lespedeza thunbergii* (DC.) Nakai subsp. *thunbergii* f. *alba* (Nakai) H. Ohashi & K. Ohashi (new combination) is adopted as the correct scientific name of “Shirobana-hagi” (or “Shirahagi”), a plant of traditional, commonest white-flowered *Lespedeza* cultivated in Japan. The plant is considered to be derived from a spontaneous white-flowered race of *L. thunbergii* subsp. *thunbergii* occurring in Korea. Synonyms and bibliographic of the name *L. thunbergii* f. *alba* are clarified.

A white-flowered *Lespedeza* called “Shirobana-hagi” or “Shirahagi” in Japanese meaning white-flowered *Lespedeza* has been widely cultivated in gardens or parks in Japan. The name is recorded by Yokoyama (ca. 1775) in the middle of Edo era, but a white-flowered *Lespedeza* presumably referable to “Shirobana-hagi” is seen in a painting of Hasegawa Tohaku already in Momoyama era (ca. 1582–1598). The identity of “Shirobana-hagi” is, however, uncertain whether it is a cultivated race distinct from a native species or a spontaneous variant derived from a native species. The plant has been treated as a distinct species: *Lespedeza japonica* Bailey (Bailey 1901, Maekawa et al. 1961, Akiyama 1988, Ohashi et al. 2008) or an infraspecific taxon of *L. thunbergii* or its synonyms (Schneider 1907, Schindler 1913, Ohwi 1953, 1965a, 1965b, Hatusima 1967, Ohashi 2001) or *L. japonica* var. *intermedia* Nakai (Nakai 1927, Lee 1965). In the present paper we intend to clarify the correct name of

“Shirobana-hagi” as a form of *L. thunbergii*.

Lespedeza thunbergii (DC.) Nakai has also been regarded as a spontaneous species (Nakai 1927, Ohwi 1953, 1965a, 1965b, Ohashi 2001, Ohashi et al. 2009) or a horticultural race (Akiyama 1988). Ohashi et al. (2009) have recognized *L. thunbergii* as the native species distributed widely in China, India (Assam), Japan, Korea and Taiwan. It is divided into several subspecies of which subsp. *thunbergii* including “Shirobana-hagi” occurs in China, Japan and Korea (Ohashi et al. 2009, Huang et al. 2010).

Miquel (1867) recorded a white-flowered *Lespedeza* from Japan without giving a scientific name to the plant through the following note: “Siebold *D. racemosi* var. *albifloram* dixit, an itaque, nisi schedularum error, flores albi?”. Nakai (1927) misunderstood this note as a publication of a new name and treated the note as “*Desmodium racemosum* var. *albiflorum* Siebold in sched. ex Miquel in Ann. Mus. Bot. Lugd. Bat. 3. p. 48 (1867) in nota sub *L. cyrtobotrya*”. Maximowicz (on page 356, 1873) recorded two kinds of white-flowered *Lespedeza* plants: “colitur circa templa Nagasaki floribus candidis” under *L. bicolor* α. *typica* and “Japonia: circa Hakodate in hortis pagi Ono, var. fl. candidis, culta (Albrecht! fl.)” under *L. bicolor* γ. *sieboldii*. These plants seem to be “Shirobana-hagi”, because only the plant had already been cultivated in Japan as the white-flowered *Lespedeza* (Yokoyama ca. 1775).

Bailey (1901) gave the first valid scientific

name to the white-flowered form, *L. japonica* L. H. Bailey. "It [= *L. japonica*] is very like the last [= *L. sieboldii* Miq.], but blooms a week or two later, and has very numerous pure white flowers. Perhaps a botanical variety of *L. sieboldii*, but distinct for horticultural purposes" (Bailey 1901 on page 904). Flowers of *Lespedeza sieboldii* Miq. were characterized by Bailey as follows: "Flowers twice larger than in the last [= *L. bicolor* Turcz.] (nearly 1/2 in. long), rose-purple, drooping in very numerous long racemes, which at the top of the plant are paniced" (Bailey 1901 on page 904). *Lespedeza sieboldii* in the quotation is now a synonym of *L. thunbergii* (Nakai 1927, Ohashi et al. 2009). Bailey (1901) considered, therefore, that *L. japonica* may be a form of *L. thunbergii*, but gave *L. japonica* for horticultural purposes.

Schneider (1907) gave the second name *L. sieboldii* var. *albiflora* C. K. Schneid. to "Shirobana-hagi" based on a specimen of Maximowicz, "*L. bicolor* var. *albiflora* Max. in Herb." The specimen is probably the same as "Japan: Kiushu: kultiviert in Tempelgärten bei Nagasaki (Maximowicz)" that was cited by Schindler (1913) among syntypes of *L. formosa* (Vogel) Koehne var. *albiflora* Schindler.

Nakai (1923) described *Lespedeza intermedia* Nakai var. *alba* Nakai based on the specimen "Chôzen (T. Nakai n. 5576)" from Korea. Later he (1927) considered this white-flowered variety as identical with "Shirobana-hagi", because he cited *L. sieboldii* var. *albiflora* C.K. Schneid. as a synonym of his var. *alba* and gave a note as "this (variety) is commonly cultivated in Japanese gardens under the Japanese name Shirobana-hagi (white-flowered *Lespedeza*)". Nakai (1927) changed *Lespedeza intermedia* var. *alba* to a synonym of *L. japonica* var. *albiflora* (Siebold ex Miq.) Nakai. However, *L. japonica* var. *albiflora* is illegitimate by citing *L. japonica* L. H. Bailey as its synonym. Akiyama (1988) recognized *L. intermedia* var. *alba* Nakai as distinct from *L. japonica* possibly because var. *alba* was a spontaneous plant as

recorded by Nakai (1927), and treated it as *L. formosa* f. *alba* (Nakai) S. Akiyama & H. Ohba.

Lespedeza intermedia Nakai (non Britton) was distinguished first by Nakai (1923) from *L. thunbergii* as *L. penduliflora* and *L. sieboldii* by leaflets, inflorescences and mode of branching, and then added shape of the vexillum (Nakai 1927 as *L. japonica* var. *intermedia* Nakai), but these characters are useless for discriminating both species. These names were treated by Akiyama (1988) as a synonym of *L. formosa* subsp. *velutina* (Nakai) S. Akiyama & H. Ohba, while all are regarded as synonymous with *L. thunbergii* subsp. *thunbergii* (Ohashi et al. 2009).

The first validly published infraspecific name of the white-flowered *Lespedeza* is *L. sieboldii* var. *albiflora* C. K. Schneid. Ohwi (1965b) made a new combination of the variety with *L. thunbergii*, var. *albiflora* (C. K. Schneid.) Ohwi. This epithet "*albiflora*" is, however, not to be used at the rank of form under *L. thunbergii*, because *L. thunbergii* f. *albiflora* (Matsum.) H. Ohashi was published by Ohashi (2001). The second infraspecific name validly published for the plant is *L. intermedia* var. *alba* Nakai, which was later regarded as f. *alba* under *L. japonica* (Lee 1965) or *L. formosa* (Akiyama 1988). Ohashi et al. (2009) considered *L. formosa* as synonymous with *L. thunbergii*. Therefore, the correct name of "Shirobana-hagi" at the rank of form of *L. thunbergii* is *L. thunbergii* f. *alba*. Lee (1980) cited "f. *alba* T. Lee" in the description of *L. thunbergii* var. *intermedia* (Nak.) T. Lee in his "Illustrated Flora of Korea", but the name is not validly published. We propose, therefore, a new combination *L. thunbergii* f. *alba* in this paper.

Lespedeza thunbergii (DC.) Nakai subsp. *thunbergii* f. *alba* (Nakai) H. Ohashi & K. Ohashi differs from *L. thunbergii* subsp. *thunbergii* f. *miyagialba* H. Ohashi & K. Ohashi in having obtuse leaflets with uniformly, often dense, puberulence on the upper surface of leaflets and somewhat shorter inflorescences. The latter form is a cultivated variant derived from *L. thunbergii* subsp. *thunbergii* f.



Fig. 1. Holotype of *Lespedeza intermedia* var. *alba* Nakai (Nakai 5576 TI). Courtesy of A. Shimizu (TI).

thunbergii.

Lespedeza thunbergii subsp. *thunbergii* f. *alba* (Nakai) H. Ohashi & K. Ohashi grown in wild has been rarely collected or reported so far and recognized in some cases as distinct taxon from cultivated one. Nakai (1927) cited only one specimen “Chôzen prov. Kôgen (T. Nakai n. 5576), spontanea!” under *L. japonica* var. *albiflora* Nakai, which is the type specimen of *L. intermedia* var. *alba* Nakai (Fig. 1). He (1927) added a word “spontanea” to the original description of the type specimen, meaning that the white-flowered plant grew in wild, not cultivated. The type locality is present Jangeon (Tongchon Road on the label of holotype, see Fig. 1), Goseong-gun, Kangwon Province in North Korea. Lee (1965) added another locality for the white-flowered form: Suwon, Kyunggi Province, South Korea. Maekawa (1938) introduced a specimen of *L. japonica* noted as spontaneous in Mie Prefecture, central Honshu, but it was regarded by Akiyama (1988) as dubiously wild. Hatusima (1967) noted a wild plant of *L. japonica* (as *L. formosa* f. *albiflora* (Siebold) Hatusima) growing in Fukuoka city, Kyushu, Japan, but he showed neither its detailed locality nor its specimens. No other habitats of the white-flowered forms have been recorded from Korea and Japan in wild state.

The correct scientific name of “Shirobana-hagi” and its synonyms are as follows:

Lespedeza thunbergii* (DC.) Nakai subsp. *thunbergii

f. *alba* (Nakai) H. Ohashi & K. Ohashi, comb. et stat. nov.

L. bicolor Turcz. α . *typica* Maxim. in Trudy Imp. S.-Peterburgsk. Bot. Sada **2**: 356 (1873), p. p., cum “colitur circa templa Nagasaki floribus candidis”.

L. bicolor Turcz. γ . *sieboldii* Maxim. in Trudy Imp. S.-Peterburgsk. Bot. Sada **2**: 356 (1873), p. p., cum “Japonia: circa Hakodate in hortis pagi Ono, var. fl. candidis, culta (Albrecht! fl.)”.

L. japonica L. H. Bailey, Cyclop. Am. Hort. **2**: 904 (1901) [**Type**: U.S.A. Philadelphia. Meeban. Bailey s.n. 26 Sep. 1899 (BH-lectotype designated by Akiyama (1988) as holotype)]; Nakai, *Lespedeza* Jap. Kor.: **23** (1927), p. min. p., incl. var. *albiflora* Nakai (nom. illeg.), cet. excl.; Makino, Fl. Jap. Illust. Suppl.: 1170, f. 3498 (1956); Maekawa et al., Makino’s New Illust. Fl. Jap.: 308 (1961); Murata in Act. Phytotax. Geob. **29**: 100 (1978), incl. f. *japonica*, p.p., excl. *Desmodium racemosum* var. *albiflorum* Siebold ex Miq. et *L. bicolor* var. *intermedia* f. *albiflora* Matsum.; H. Ohashi in Satake & al., Wild Flow. Jap. **2**: 205, plate 196–5 (1982), ut “var. *japonica* f. *japonica*”; Akiyama in Univ. Mus. Univ. Tokyo Bull. **33**, 154 (1988) ut “cv. Japonica”, p.p., excl. *Desmodium racemosum* var. *albiflorum* Siebold ex Miq., *L. bicolor* var. *intermedia* f. *albiflora* Matsum. et *L. bicolor* var. *alba* Bean; Ono et al., Revised Makino’s New Illust. Fl. Jap.: 333 (1989); Ohashi et al., New Makino’s Illust.: 333 (2008) as ‘Albiflora’.

L. sieboldii Miq. var. *albiflora* C. K. Schneid., Illust. Handb. Laubh. **2**: 113 (1907) [**Type**: “(bicolor var. *albiflora* Max., in Her.)”].

L. formosa (Vogel) Koehne var. *albiflora* Schindl. in Bot. Jahrb. Syst. **49**: 582 (1913).

L. intermedia Nakai var. *alba* Nakai in Bot. Mag. (Tokyo) **37**: 77 (1923) [**Type**: North Korea. Kangwon Province, Goseong-gun, Jangeon. T. Nakai 5576 (TI-holotype)]. (Fig. 1)

L. japonica var. *albiflora* Nakai, *Lespedeza* Jap. Kor.: **25** (1927), ut “(Siebold ex Miq.) Nakai”, nom. illeg.

[*Desmodium racemosum* var. *albiflorum* Siebold ex Miq.: Nakai, *Lespedeza* Jap. Kor.: **25** (1927), pro syn. – invalid designation].

L. penduliflora (Oudemans) Nakai var. *albiflora* (C. K. Schneid.) Ohwi in J. Jap. Bot. **26**: 234 (1951), ut “(Siebold ex Miq.) Ohwi”; Ohwi, Fl. Jap.: 679 (1953), p.p., excl. *Desmodium racemosum* var. *albiflorum* Sieb. ex Miq. et *L. bicolor* var. *intermedia* f. *albiflora* Matsum.

L. thunbergii (DC.) Nakai ‘Albiflora’: Ohwi,

Fl. Jap. ed. Engl.: 559 (1965), p.p., excl. *D. racemosum* var. *albiflorum* Siebold ex Miq. et *L. bicolor* var. *intermedia* f. *albiflora* Matsum.

L. thunbergii var. *albiflora* (C. K. Schneid.) Ohwi, Fl. Jap. ed. rev.: 790 & 1438 (1965), p.p., excl. *Desmodium racemosum* var. *albiflorum* Sieb. ex Miq. et *L. bicolor* var. *intermedia* f. *albiflora* Matsum.; Ohwi & Kitagawa, New Fl. Jap. rev.: 894 (1992), p.p., excl. *D. racemosum* var. *albiflorum* Sieb. ex Miq. et *L. bicolor* var. *intermedia* f. *albiflora* Matsum.

L. japonica var. *intermedia* Nakai f. *alba* (Nakai) T. Lee in Bull. Seoul Nat. Univ. Forest No. 2: 16 (1965); T. Lee, Bibliogr. Woody Pl. 291 (1966).

L. formosa f. *albiflora* Hatus. in Mem. Fac. Agr. Kagoshima Univ. 6: 8 (1967), ut “(Siebold) Hatus.”, nom. illeg.

L. formosa subsp. *velutina* f. *alba* (Nakai) S. Akiyama & H. Ohba in Akiyama in Univ. Mus. Univ. Tokyo Bull. no. 33: 132 (1988). syn. nov.

Nom. Jap.: Shirobana-hagi (Shirahagi) シロバナハギ (シラハギ).

Distr.: Native in Korea. Cultivated widely in Japan.

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マメ科シロバナハギの学名 (大橋広好, 大橋一晶)

シロバナハギ (シラハギ) は日本で古くから庭園や公園に観賞のために広く植えられている。その学名は *Lespedeza japonica* L. H. Bailey が最も早く、1901年に正式に発表された。Bailey は「植物学的にはミヤギノハギの変種 (植物学上の変形) であろうが、園芸上は別個である」として種ランクで命名した。当初から Bailey が認

めているように、植物学的にはシロバナハギはミヤギノハギ *L. thunbergii* (DC.) Nakai にもっとも近い種類である。ミヤギノハギの範囲については諸説あるが、Ohashi et al. (2009) は日本、朝鮮、台湾、中国、インド東部アッサムに分布する野生種であるとした。この種（広義のミヤギノハギ）は著しく多形で、いくつかの亜種に分けられ、その中の subsp. *thunbergii* は狭義のミヤギノハギで、日本、朝鮮、中国に分布し、ビッチウヤマハギ、チョウセンヤマハギ、ニシキハギなどは同一と考えられる (Ohashi et al. 2009)。われわれはシロバナハギはミヤギノハギ(狭義)に由来する野生白花品であると考えている。

シロバナハギをミヤギノハギの種内分類群とする学名は Schneider (1907) が最も早く発表していて、*Lespedeza sieboldii* Miq. var. *albiflora* C. K. Schneid. である。大井 (1965b) はこの学名に基づいて *L. thunbergii* (DC.) Nakai var. *albiflora* (C. K. Schneid.) Ohwi を発表した。しかし、この変種形容語を生かした *L. thunbergii* f. *albiflora* (C. K. Schneid.) という組み合わせは *L. thunbergii* f. *albiflora* (Matsum.) H. Ohashi の後続同名となるために、作ることはいできない。次に発表された学

名は *L. intermedia* Nakai var. *alba* Nakai (1923) である。この学名を *L. thunbergii* に組み替えかえて、品種ランクでシラハギの学名としなければならない。李昌福「大韓植物圖鑑」(1980) の 1869. *Lespedeza thunbergii* var. *intermedia* (Nak.) T. Lee には “for. *alba* T. Lee” の名称があるが、この新組み合わせは正式に発表されていない。したがって、シラハギの学名として新たに *L. thunbergii* f. *alba* (Nakai) H. Ohashi & K. Ohashi を提案した。

シロバナハギの野生品は朝鮮半島（北朝鮮江原道）から中井 (1923) によってシロバナチョウセンヤマハギとして報告された。中井 (1927) は後にこれをシロバナハギであると訂正した。Lee (1965) も韓国から新産地を追加した。前川 (1938) は三重県で黒川喬雄採集の自生とされる *L. japonica* を紹介したが、Akiyama (1988) は自生を疑問とした。Hatusima (1967) は福岡市でみたことがあるとしているが、これは栽培品の逸出が疑われる。日本ではまだシロバナハギ野生品は見つかっていないと思われる。

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Subhasis PANDA^{a,*} and Munivenkatappa SANJAPPA^b: The Entity of *Enkianthus indicus* M. R. Debta & H. J. Chowdhery (*Ericaceae*)

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Summary: *Enkianthus indicus* M. R. Debta & H. J. Chowdhery (*Ericaceae*) is a minor quantitative variation of the *E. deflexus* (Griff.) C. K. Schneid. complex and therefore the former is proposed here as a synonym under the latter species. Photographs of holotype and paratype of *E. indicus* as well as the type photograph and specimen examination of *E. deflexus* in Indian herbaria are provided to clear confusion.

After a critical examination of the holotype

(M. R. Debta 40542, CAL; Fig. 1A) and paratype (M. R. Debta 40880, CAL; Fig. 1B), it was observed that *Enkianthus indicus* M. R. Debta & H. J. Chowdhery is a member of the *E. deflexus* (Griff.) C. K. Schneid. complex. The detailed description of *E. indicus* as described by M. R. Debta and H. J. Chowdhery (J. Non-Timber Forest Products 16(2): 173–174, 2009) was the protologue description of *E. deflexus* (Griff.) C. K. Schneid. (Ill. Handb. Laubholz.